



COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

DEVAL L. PATRICK  
Governor

TIMOTHY P. MURRAY  
Lieutenant Governor

IAN A. BOWLES  
Secretary

LAURIE BURT  
Commissioner

September 18, 2007

Via e-mail and US Mail  
Jeffrey Nutting  
Franklin Town Administrator  
150 Emmons Street  
Franklin, MA 02038-2095

Permittee: Town of Franklin  
PWS ID #: 2101000  
Water Management Permit Modification  
Water Management Permit # 9P-2-20-101.01

Dear Mr. Nutting:

Please find the attached documents:

- Findings of Fact in Support of the 5-Year Review Permit Decision; and,
- Water Management Act Permit 9P-2-20-101.01 (Charles River Basin) issued to the Town of Franklin.,

On May 1, 2006, MassDEP finalized the transfer of the Town of Franklin from the Southeast Region to the Central Region of MassDEP. Please notice that your PWSID number has changed, and your Water Management Permit number reflects this change. Your registration number will be adjusted during the registration renewal process. Water Management registrations will be renewed by January 1, 2008.

If you have any questions regarding the permit, please contact Duane LeVangie at (617) 292-5706.

Sincerely,

Glenn Haas  
Acting Assistant Commissioner  
Bureau of Resource Protection

Y:\DWP Archive\CERO\Franklin-Permit 9P-2-20-101.01-WMA-9-18-2007

Cc: Duane LeVangie, WMA Manager, Boston, MA 02108  
Martin Suuberg, DEP CERO Regional Director, 627 Main Street, Worcester, MA 01608  
Robert Cantoreggi, Franklin DPW, 150 Emmons Street, Franklin, MA 02038-2095  
Paul Howard, Tata & Howard, Inc., 125 Turnpike Road, Westborough, MA 01581  
Robert Zimmerman, Jr. Charles River Watershed Association, 190 Park Road, Weston, MA 02493

**Communication for Non-English Speaking Parties (310 CMR 1.03(5)(a))**

English

This document is important and should be translated immediately.

Spanish

*Este documento es importante y se debe traducir inmediatamente.*

Portuguese

*Este original é importante e deve ser traduzido imediatamente.*

Italian

*Questo documento è importante e dovrebbe essere tradotto immediatamente.*

Greek

Αυτό το έγγραφο είναι σημαντικό και πρέπει να μεταφραστεί αμέσως.

French

*Ce document est important et devrait être traduit immédiatement.*

Chinese (traditional)

這個文件重要和應該立刻被翻譯。  
这个文件重要和应该立刻被翻译。



COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

DEVAL L. PATRICK  
Governor

TIMOTHY P. MURRAY  
Lieutenant Governor

IAN A. BOWLES  
Secretary

LAURIE BURT  
Commissioner

**Findings of Fact in Support of Permit Modification**  
**Water Management Permit # 9P-2-20-101.01**

The Massachusetts Department of Environmental Protection (the Department) has completed its 5-year review of the Town of Franklin's (Franklin) Water Management Act permit for the authorized withdrawal from the Charles River Basin. Franklin's most recent Order To Complete response dated June 30, 2006, and Franklin's letter of May 15, 2007, from Robert Cantoreggi, Director, Franklin DPW to Duane LeVangie, DEP Water Management program have been evaluated for this review. In addition, the Department received two detailed comment letters in response to the August 17, 2006 draft permit. Those letters from the Charles River Watershed Association (October 2, 2006 from Margaret Van Deusen, CRWA Deputy Director to Thomas Lamonte, DEP Water Management Program) and from Franklin's legal representative, Keegan Werlin LLP (October 2, 2006 from Nancy Kaplan and Cheryl Blaine to Paul Anderson, DEP, CERO Municipal Service Chief), have also been evaluated for this review. A response to those comments is being forwarded under separate cover.

After meetings to discuss relevant data and in response to Franklin's submitted information to withdraw water from the Charles River Basin, the Department hereby modifies the Water Management Act permit 9P-2-20-101.01 (the Permit) in accordance with the Act. The Department makes the following Findings of Fact in support of the attached Permit, and includes herewith its reasons for modifying the permit and for conditions of approval imposed, as required by MGL c 21G, s 11 and 310 CMR 36.00.

**Franklin's Water Withdrawal History**

Franklin is registered for an average annual daily withdrawal volume of 1.99 million gallons per day (MGD). Franklin's original Water Management permit was issued on December 21, 1990. Based on 20-year demand projections prepared by the Department of Environmental Management (now DCR) and approved by the Water Resources Commission (WRC) in the late 1980s, the permit authorized additional withdrawals of up to 0.81 MGD from 1990-1994, 1.24 MGD from 1994-1999, 1.65 MGD from 1999-2004 and 2.11 MGD from 2004-2009. In 1998, Franklin submitted an application for a permit amendment to add new sources, which was determined incomplete by the Department for failure to include minimum requirements and conditions to minimize impacts from several of its sources. Since that time discussions have continued between Franklin, neighboring communities Millis and Norfolk, the Charles River Water Association, and the Department concerning interactions between pumping Franklin's wells and local environmental impacts that can be addressed through Franklin's Water Management Act permit.

Franklin recognizes the need and is committed to reducing impacts on Kingsbury Pond. The well management plan submitted in Franklin's June 30, 2006 response to the Order-To-Complete outlined Franklin's intent to reduce pumping at Well #4 to lessen impacts on Kingsbury Pond, and pursue varying

pumping rates from town wells to lessen the impacts on the Charles River and its local tributaries. It should be noted that plan is based on permitted withdrawals of 2.11 MGD and this modified permit has reduced the maximum authorized withdrawals for 2004-2009 from 2.11 MGD to 1.65 MGD based on actual water use since 2000. Therefore, the Department would support the pumping schedules in the plan only to the extent that Franklin's average annual water withdrawals continue to comply with the conditions of this permit.

The Department recognizes Franklin's other ongoing efforts to reduce impacts. These include discussions with Norfolk about inter-town well-pumping agreement for Norfolk's proposed well at the Mill River site, and Franklin's negotiations with Millis concerning a water purchasing agreement.

### **The Water Management Act**

The Act requires that the Department issue permits that balance a variety of factors including:

- Reasonable protection of existing water uses, land values, investments and enterprises;
- Reasonable conservation consistent with efficient water use;
- Reasonable protection of public drinking water supplies, water quality, wastewater treatment capacity, waste assimilation capacity, groundwater recharge areas, navigation, hydropower resources, water-based recreation, wetland habitat, fish and wildlife, agriculture, flood plains; and
- Reasonable economic development and job creation.

The Department has determined that there is documented evidence that water withdrawals and, to a lesser extent, an increase in development and impervious area, combined with the movement of wastewater to other basins or sub-basins, substantially contribute to low flow in the Commonwealth's rivers and their tributaries. These low flows impact the ability of rivers and tributaries to adequately serve all of the competing uses described in the Act.

To better achieve the balance of competing water uses mandated by the Act, the Department has adopted the "Water Management Policy For Permit and Permit Amendment Applications and 5-Year Review, Effective Date: April 2, 2004" and the "Guidance Document for Water Management Act Permitting Policy, Effective Date: January 17, 2006". The Policy, WMA Policy #: BRP/ DWM/DW/P04-1, and Guidance, Guidance #BRP/DWM/DW/G05-01, can be found on the Department's web site at <http://www.mass.gov/dep/brp/wtrm/wtrmregs.htm>. The Policy and Guidance identify specific Performance Standards and conditions to be applied to new Water Management permits and to existing permits at the time they are amended, during 5-year permit review or permit renewal. The Department has applied these Performance Standards and conditions in Franklin's permit.

In determining the Performance Standards in Water Management permits, the Department relies primarily upon the stressed basin determinations contained in the Water Resources Commission's (WRC) Stressed Basins Report approved December 13, 2001, and upon future revisions to these stressed basin determinations by the WRC. The Department also conducts reviews of other available research and reports by the United States Geological Society, the Department's Watershed Water Quality Assessment Reports and any other pertinent reports available for specific river basins.

### **Performance Standards in Franklin's Water Management Permit**

Franklin's sources are located in the Charles River Basin, which is identified as a medium stress basin by the WRC's Stressed Basins Report. The map of stressed basins can be reviewed at the following

link:<http://www.mass.gov/dep/brp/wtrm/files/stresmap.htm>. The Policy and Guidance establish the following Performance Standards for permittees that withdraw water from medium stressed river basins:

1. Residential gallons per capita day water use (RGPCD) of 65 gallons or less;
2. Unaccounted for water (UAW) of 10% or less;
3. Summer Limits on Withdrawals implemented through either a calendar trigger or a streamflow trigger; and
4. Offset Feasibility Studies for permittees that exceed the baseline withdrawal volume (Baseline) established for each permittee.

The Performance Standards of 65 gallons per day or less for residential per capita water use and 10% or less for unaccounted for water conform with the Massachusetts Water Resources Commission's Water Conservation Standards (July 2006) for effective water conservation for public water suppliers. The Department believes these standards are reasonable based on studies and data developed throughout the country, the use of 10% UAW in various water supply industry standards, and the fact that the average values in 2006 for Massachusetts were 68 RGPCD, and 13% UAW. While these Performance Standards represent the minimum standards required for compliance with the permit, the Department believes that they are reasonable standards for effective water conservation and that through the implementation of all the terms and conditions of Water Management permits, permittees can meet the Performance Standards for RGPCD and UAW.

The Guidance, as revised on January 17, 2006, provides implementation and enforcement guidelines for permitting. It establishes:

- timelines for compliance with the Performance Standards;
- procedures and requirements for permittees that fail to document compliance with the Performance Standards within those timelines;
- enforcement margins and enforcement forbearance that the Department will employ for permittees in high and medium stress basins.

For more information on enforcement margins and forbearance, see the Guidance Document for Water Management Act Permitting Policy, Section II, paragraph 3, and Section III, paragraph 3 (<http://www.mass.gov/dep/water/laws/policies.htm#wmgt>).

The Department commends Franklin for successfully meeting each of the Charles River Basin Performance Standards in 2006. Franklin's RGPCD has been below 65 since 2002 and UAW was below 8% in 2006. Since 2000, Franklin has proactively established conservation programs and summertime outdoor water use restrictions that exceed some of the conditions of this permit. Franklin's programs have been exemplary, and the Department has every reason to believe that Franklin intends to continue those programs. This permit includes some conditions that Franklin is currently exceeding. Standard permit conditions on RGPCD, UAW, outdoor watering restrictions and specific conservation measures are included to provide consistency among all Water Management Permits in stressed watersheds, to promote a "level-playing field" of minimum conservation programs that the Department expects all public water suppliers will be able to implement, and to ensure that permittees continue to meet the minimum standards throughout the life of the permit.

Finally, this permit is being issued near the end of the 20-year Water Management Act permit cycle in the Charles River Basin. This permit will expire on February 28, 2009, and a request to renew for the next 20 years may be made at that time. The Department expects to renew WMA permits as they expire, and so writes permits with the expectation that long-term requirements will continue in the renewed permits.

## **Finding of Fact for Specific Permit Conditions**

In issuing permits, the Department looks primarily at site-specific impacts and other issues specific to the system, such as impacts to nearby streams, wetlands, or other water users, justification of long-term demand projections and the capacity of permitted withdrawal points. The conditions are intended to ensure the efficient use of water and to mitigate the potential impact of withdrawals.

**Special Conditions 1, Maximum Authorized Annual Average Withdrawal Volume**, reflects the total authorized withdrawal volume of 3.64 MGD (1.99 MGD registered + 1.65 MGD permitted = 3.64 MGD) through the February 28, 2009 expiration date of this permit.

This is a change from the original permit (issued 12/21/1990) and requires explanation. The original Water Management permits issued to communities in the Charles River Basin in 1990 were based on 20-year demand projections reviewed and approved by the WRC in the late 1980's. Franklin's projections showed demand increasing to 4.10 over 20 years, so the original WMA permit authorized withdrawals of up to 4.10 MGD between 2004 and 2009 (1.99 MGD registered + 2.11 MGD permitted = 4.10 MGD).

Actual water use has not risen to the levels projected in the 1980's. Since 2000, Franklin's water use has not risen above 3.10 MGD, and in recent years has fallen steadily to 2.66 MGD in 2006. This modified permit has held the total authorized withdrawals for 2007-2009 at 3.64 MGD (1.99 MGD registered + 1.65 MGD permitted = 3.64 MGD). This is the volume authorized for 1999-2004 in the original permit.

Franklin's permit volumes in Special Condition 1 are based on demonstrated demand. Franklin's total water use should remain within these volumes whether it is pumped by Franklin from their permitted wells or purchased from the Town of Millis or another source.

Water use above 3.10 MGD Baseline for Franklin will require the implementation of offsets if feasible. See Special Condition 8.

**Special Condition 2, Maximum Authorized Daily Withdrawals from each Withdrawal Point**, during the 1990's, Franklin conducted Zone II delineations and established DEP-approved pumping rates for its wells. In this modified permit, the Zone II pumping rates replace the pumping rates specified in the 1990 Water Management permit. In addition, Franklin has submitted a Zone II Report by Geosphere, dated June, 2006, for the re-delineation of Zone IIs for existing Wells #3 and #6, and a Zone II delineation for Well #8. The Geosphere Report has been reviewed and the Zone II rates developed in that report and approved by the Department are incorporated into this modified permit as the maximum authorized daily withdrawals for Well #3 at 350 gpm (0.5 MGD), Well #6 at 500 gpm (0.72 MGD), and Well #8 at 243 gpm (0.35 MGD).

The Department's 5-year review of Franklin's Water Management permit uncovered a few apparent maximum day exceedences for certain Franklin wells. The apparent exceedences were attributed to confusion about the approved pumping rates for individual wells, and to the fact that the maximum day well production in some cases were reported in the Annual Statistical Reports for periods greater than 24 hours. Both circumstances have been clarified and corrected.

**Special Condition 3, Zone of Contribution Delineations**, requirement has been met and no further delineations are required as a condition of this permit.

**Special Condition 4, Wellhead Protection**, requires that Franklin amend the local Wellhead Protection regulations to include the non-zoning floor drain protection 310 CMR 22.21(2)(a)(8). This is a standard requirement of public water supply permittees to promote protection of water supply resources.

**Special Condition 5, Performance Standard for Residential Gallons Per Capita Day Water Use**, discussed previously.

**Special Condition 6, Performance Standard for Unaccounted for Water**, discussed previously.

**Special Condition 7, Summer Limits on Withdrawals**, addresses limits on nonessential outside water use from May through September. Franklin has instituted local summer water use restrictions that are equivalent, and in some regards more stringent, than those required in Water Management Permits. Franklin may continue to implement the existing practice of restricting summer water use provided restrictions are implemented no later than the first Monday in June, and are lifted no earlier than the second Monday in September (see Attachment A).

**Special Condition 8, Water Withdrawals that Exceed Baseline Withdrawal Volumes**, baseline withdrawal is the volume withdrawn in compliance with the Act during calendar year 2005, the average volume withdrawn in compliance with the Act from 2003 to 2005, or the registered volume, whichever is higher. The Department varied the baseline in this case because Franklin demonstrated that conservation measures undertaken voluntarily before 2003 have significantly reduced water use. So as not to penalize the proactive approach taken by Franklin, the Department adjusted the baseline to include the savings achieved.

Franklin's baseline withdrawal rate is 3.10 MGD or 1131.5 MGY, based upon Franklin's average daily withdrawals of 2.90 MGD from 2003-2005, plus .2 MGD savings realized through conservation measures implemented since 2000 and documented in Franklin's letter of May 15, 2007, to the DEP Water Management Program. Specifically:

- Beginning in 2000, Franklin instituted one day per week lawn watering restrictions with no watering allowed between 9 am and 5 pm;
- Franklin outlawed the installation of lawn irrigation 'deduct' meters in 2000 and has eliminated them for billing purposes which has effectively doubled the price of outdoor lawn watering;
- Franklin is half way through a 4-year, \$1.2 million townwide program to replace all meters with Neptune positive displacement AMR meters; and
- The implementation of conservation measures, several of which are outlined below, that are more stringent than those required by their original permit, including more frequent leak detection and the adoption of an increasing block rate billing structure.

Should water use rise above the 3.10 MGD Baseline, Franklin will be required to evaluate options for offsetting increased water use. If water use remains above the Baseline for more than one year, Franklin will be required to implement offsets if feasible.

**Special Condition 9, Water Conservation Requirements**, incorporates the Water Conservation Standards for the Commonwealth of Massachusetts reviewed and approved by the Water Resource Commission in July 2006.

In response to the Department's 5-year review of the Water Management permit, Franklin submitted information on its conservation program in a letter of June 30, 2006, including the following:

- Franklin reports that they conduct 100% town-wide leak detection annually;
- Franklin reports that the increasing block water rate structure has had an impact on consumption. In 2001 Franklin began a three year program to increase the block rate pricing structure to: 0-15 CCF, \$3.60 per CCF, 16-40 CCF, \$3.75 per CCF, and above 41 CCT, \$4.40 per CCF;
- Franklin reports that their distribution system has 9,308 service connections and is 100% metered. Ten years ago Franklin reviewed all commercial meters and approximately two dozen were

downsized for accuracy and all turbine meters were replaced with compound meters.

Approximately 7 years ago, Franklin reports auditing a random selection of water meters and found all were still reading accurately within American Water Works Association standards;

- Franklin requires water saving devices in municipal public buildings. Franklin's Facilities Manager estimates that half of Franklin's municipal buildings meet the current code and that all will facilities will meet the code within 3 years.
- Franklin has submitted a schedule for the irrigation of municipal recreation fields. Natural turf fields are watered twice a week with automatic irrigation systems. All systems are equipped with moisture sensors except for the Remington-Jefferson and Keller-Sullivan fields. The Department recommends that all recreation fields have sensors.

**Special Condition 10, Requirement to Report Raw and Finished Water Volumes**, ensures that the information necessary to evaluate compliance with the conditions included herein is accurately reported. All sources must be reported individually, including Wells #1 and #2.

The summary of permit conditions above as part of the Department's findings of fact is not intended to, and should not be construed as, modifying any of the Permit conditions. In the event of any ambiguity between the summary and the actual permit conditions, the Permit language shall be controlling.





COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

DEVAL L. PATRICK  
Governor

TIMOTHY P. MURRAY  
Lieutenant Governor

IAN A. BOWLES  
Secretary

LAURIE BURT  
Commissioner

This permit is issued pursuant to the Massachusetts Water Management Act (the Act) for the sole purpose of authorizing the withdrawal of a volume of water as stated herein and subject to the following special and general conditions. This permit conveys no right in or to any property beyond the right to withdraw the volume of water for which it is issued.

**PERMIT NUMBER:** 9P-2-20-101.01      **RIVER BASIN:** Charles

**PERMITTEE:** Town of Franklin  
150 Emmons Street  
Franklin, MA 02038

**ISSUANCE DATE:** December 21, 1990  
**MODIFICATION DATE:** September 18, 2007  
**EXPIRATION DATE:** February 28, 2009

**NUMBER OF WITHDRAWAL POINTS:** 10

Groundwater: 10      Surface Water: 0

**USE:** Public Water Supply

**DAYS OF OPERATION:** 365

**LOCATION(S):**      **Table 1: Withdrawal Point Identification**

Well Name/Location	PWS Source ID Code
Well #1 Hayward St.	4101000-01G
Well #2 Hayward St.	4101000-02G
Well #3 Grove St.	4101000-03G
Well #4 Miller St.	4101000-04G
Well #5 Miller St.	4101000-05G
Well #6 Grove St.	4101000-06G
Well #7 Elizabeth Rd.	4101000-07G
Well #8 Populatic St.	4101000-08G
Well #9 East Central St.	4101000-09G
Well #10 Vine St.	4101000-10G

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057.

<http://www.mass.gov/dep> • Phone (508) 792-7650 • Fax (508) 792-7621 • TDD # (508) 767-2788

## **SPECIAL CONDITIONS**

### **1. Maximum Authorized Annual Average Withdrawal Volume**

This permit authorizes the Town of Franklin (Franklin) to withdraw water from the Charles River Basin at the rate described below in Table 2. The volume reflected by this rate is in addition to the 1.99 million gallons per day previously authorized to Franklin under Water Management Act Registration #220101.02 (formerly #420101.02) for withdrawal from the Charles River Basin. The permitted volume is expressed both as an annual average daily withdrawal rate (million gallons per day or MGD), and as a total annual withdrawal volume (million gallons per year or MGY) for each five-year period of the permit term.

The Department of Environmental Protection (the Department) bases these withdrawal volumes on the raw water withdrawn from the authorized withdrawal points, and will use the raw water amount to assess compliance with the registered and permitted withdrawal volumes.

**Table 2: Maximum Authorized Withdrawal Volumes**

5-Year Periods		Total Raw Water Withdrawal Volumes			
		Permit		Permit + Registration	
		Daily Average (MGD)	Total Annual (MGY)	Daily Average (MGD)	Total Annual (MGY)
Period One Years 1-5	12/21/1990 to 2/28/1994	0.81	295.65	2.80	1,022.0
Period Two Years 6-10	3/1/1994 to 2/28/1999	1.24	452.60	3.23	1,178.95
Period Three Years 11-15	3/1/1999 to 2/29/2004	1.65	602.25	3.64	1,328.6
Period Four Years 16-20	3/1/04 to 9/18/07	2.11	770.15	4.10	1,496.5
	9/18/07 to 2/28/2009	1.65	602.25	3.64	1,328.6

- The baseline withdrawal for the purpose of triggering Special Condition 8, Water Withdrawals that Exceed Baseline Withdrawal Volumes, is 3.10 MGD, or 1131.5 MGY.
- Franklin's overall water use, whether through withdrawal from their own registered and permitted sources and/or from a purchase of water from Millis, is limited to the above volumes.

### **2. Maximum Authorized Daily Withdrawals from each Withdrawal Point**

Withdrawals from individual withdrawal points are not to exceed the approved maximum daily volumes listed below without specific advance written approval from the Department. The authorized maximum daily volume is the approved rate of each source. In no event shall the combined withdrawals from the individual withdrawal points exceed the withdrawal volumes authorized above in Special Condition 1.

<b>Table 3: Maximum Daily Withdrawal Volumes</b>		
<b>Well Name</b>	<b>PWS Source ID Code</b>	<b>Maximum Daily Rate (MGD)</b>
Well #1 Hayward St.	4101000-01G	0.47
Well #2 Hayward St.	4101000-02G	0.72
Well #3 Grove St.	4101000-03G	0.50
Well #4 Miller St.	4101000-04G	0.92
Well #5 Miller St.	4101000-05G	0.50
Well #6 Grove St.	4101000-06G	0.72
Well #7 Elizabeth Rd.	4101000-07G	0.58
Well #8 Populatic St.	4101000-08G	0.35
Well #9 East Central St.	4101000-09G	0.50
Well #10 Vine St.	4101000-10G	0.50

### **3. Zone of Contribution Delineations**

Department records show that Franklin's Wells #1 through #10 have MassDEP approved Zone II delineations. No further Zone II work is required as a condition of this permit.

### **4. Wellhead Protection**

Department records indicate that Franklin's sources do not fully meet the requirements of 310 CMR 22.21(2). Franklin must adopt a non-zoning floor drain protection regulation, 310 CMR 22.21(2)(a)(8), within two years of the effective date of this permit. The final text of the control measures must be submitted to the Wellhead Protection Program in Boston.

### **5. Performance Standard for Residential Gallons Per Capita Day Water Use**

Franklin's Performance Standard for Residential Gallons Per Capita Day (RGPCD) is 65 gallons. Permittee shall be in compliance with the Performance Standard by December 31, 2009. Franklin shall report its RGPCD water use annually in its Annual Statistical Report (ASR) and document compliance with this Performance Standard in its ASR for 2009 and each year thereafter.

Franklin shall report its RGPCD and the calculation used to derive that figure as part of its ASR including, without limitation, the source of the data used to establish the service population and the year in which this data was developed.

See Appendix A for information on the requirements if the Performance Standard for RGPCD is not met.

### **6. Performance Standard for Unaccounted for Water**

Franklin's Performance Standard for Unaccounted for Water (UAW) is 10% of overall water withdrawal. Franklin shall be in compliance with the Performance Standard by December 31, 2009. Franklin shall report its UAW and the calculation used to derive that figure annually in its Annual Statistical Report (ASR) and document compliance with this Performance Standard in its ASR for 2009 and each year thereafter.

UAW is defined as the residual resulting from the total amount of water supplied to a distribution system as measured by master meters, minus the sum of all amounts of water measured by consumption meters in the distribution system, and minus confidently estimated and documented amounts used for certain necessary purposes.

UAW shall include, without limitation: unavoidable leakage, recoverable leakage, meter inaccuracies (unless they fall under the category of source meter calibration which allows for adjustment per results of source meter calibration); errors in estimation of stopped meters, unauthorized hydrant openings, illegal connections, stand pipe overflows, data processing errors; and undocumented fire fighting uses. The need for water main flushing and the use of water in construction or meter calibration shall be metered or estimated as appropriate to assist in determining actual demand. Volumes flushed to waste shall be reported on Franklin's ASR.

Uses that can be confidently estimated and documented in writing include: storage tank overflow and drainage; water main flushing and flow testing; fire fighting; bleeding or blow-offs; sewer and stormwater system flushing; and cleaning and street cleaning. Any adjustments made as a result of the properly documented source meter calibration shall be provided as required by the ASR.

Any adjustment in the calculation of UAW made as a result of confidently estimated uses shall be fully documented as required in the ASR.

See Appendix B for information on requirements if the Performance Standard for UAW is not met.

## 7. Summer Limits on Withdrawals

Franklin shall limit summer water withdrawals by implementing one of the following options (Table 4) or by continuing to implement the summer water use restrictions developed by Franklin and included in Attachment A. Nothing in this permit shall prevent Franklin from implementing restrictions stricter than those set forth in Options 1 and 2 or Attachment A.

<b>Table 4: Summer Limits on Withdrawals</b>	
<p style="text-align: center;"><b><u>Option 1: Calendar Trigger</u></b></p> <p>At a minimum, implement the following restrictions on nonessential outdoor water use between May 1<sup>st</sup> and September 30<sup>th</sup>.</p> <ul style="list-style-type: none"> <li>• No nonessential outdoor water use allowed, except that sprinklers may be used for lawn watering outside the hours of 9 AM to 5 PM up to <b>two (2)</b> days per week.</li> <li>• Upon the declaration of a drought level of "Watch" (or higher drought designation) by the Massachusetts Drought Management Task Force for the region in which Franklin's withdrawal source(s) is located*, the restrictions set forth in Option 2 must be implemented and remain in place until the drought level is</li> </ul>	<p style="text-align: center;"><b><u>Option 2: Stream Flow Trigger</u></b></p> <p>At a minimum, implement the following restrictions on nonessential outdoor water use whenever stream flow falls below a mean daily streamflow of 0.50 cubic feet per second per square mile (cfsm) for <b>three (3)</b> consecutive days between May 1<sup>st</sup> and September 30<sup>th</sup>. Stream flow shall be measured at the USGS Charles River at Medway Gauge Station at Location #01103280 (Medway Gauge)**. At the Medway Gauge, 0.50 cfsm is equal to 32.9 cubic feet per second (cfs).</p> <ul style="list-style-type: none"> <li>• No nonessential outdoor water use allowed, except that sprinklers may be used for lawn watering outside the hours of 9 AM to 5 PM <b>one (1)</b> day per week.</li> </ul>

<b>Table 4: Summer Limits on Withdrawals</b>	
returned to “Advisory” or “Normal”.	<ul style="list-style-type: none"> <li>Once implemented, the restrictions shall remain in place until streamflow at the <b>Medway Gauge</b> meets or exceeds <b>0.50 cfsm (32.9 cfs)</b> for <b>seven (7)</b> consecutive days.</li> </ul>

\*This information is available at <http://www.mass.gov/dcr/waterSupply/rainfall/drought.htm>.

\*\*Gauge readings can be accessed at <http://waterdata.usgs.gov/ma/nwis/current/?type=flow>. See Appendix C for more detailed instructions on accessing mean daily streamflows for the Medway Gauge.

As used herein, “nonessential outdoor water use” includes uses that are not required:

- (a) for health or safety reasons;
- (b) by regulation;
- (c) for the production of food and fiber;
- (d) for the maintenance of livestock; or
- (e) to meet the core functions of a business.

For additional guidance on nonessential outdoor water use, see Appendix C.

Beginning in 2008, Franklin shall implement and enforce the required restrictions outlined in Option 1 or Option 2 above or it shall choose the summer water use restrictions in Attachment A: Franklin Water Use Restrictions. If Franklin chooses Attachment A: Franklin Water Use Restrictions, then Franklin shall notify its customers before water use restrictions go into effect each year of the restrictions and the consequences for failing to adhere to the restrictions.

Franklin shall document its compliance with the summer limits on withdrawal requirements annually in its ASR for 2008, and each year thereafter.

### **Option 1: Calendar Trigger**

If Franklin chooses **Option 1: Calendar Trigger**, then Franklin shall notify its customers each year by April 15<sup>th</sup> of the restrictions and the consequences for failing to adhere to the restrictions. Notice must include:

- The need to limit water use, especially nonessential outdoor water use, to protect streamflow for aquatic life and to ensure a sustainable drinking water supply;
- Ways individual homeowners can limit water use, especially nonessential outdoor water use;
- A detailed description of the restrictions and penalties for violating the restrictions.

Notice that restrictions have been put in place shall be filed each year with the Department within 14 days of the restriction’s effective date. Filing shall be in writing on the Water Use Restrictions Form at <http://www.mass.gov/dep/water/approvals/wmgforms.htm#conserve>.

### **Option 2: Stream Flow Trigger**

If Franklin chooses **Option 2: Stream Flow Trigger**, when streamflow falls below 0.50 cfsm (32.9 cfs at the Medway Gauge) for three (3) consecutive days, Franklin shall notify its customers as soon as possible, and in any event no more than three days after implementation, of the restrictions and the consequences for failing to adhere to the restrictions. Notice must include:

- The streamflow value triggering the required notification;

- The need to limit water use, especially nonessential outdoor water use, to protect streamflow for aquatic life and to ensure a sustainable drinking water supply;
- Ways individual homeowners can limit water use, especially nonessential outdoor water use;
- A detailed description of the restrictions and penalties for violating the restrictions.

Notice that restrictions have been put in place shall be filed with the Department within 14 days of the restriction's effective date. Filing shall be in writing on the Water Use Restrictions Form at <http://www.mass.gov/dep/water/approvals/wmgforms.htm#conserve>.

Notice to customers and the Department need not be provided if Franklin has already implemented water use restrictions that conform to the applicable restrictions and those restrictions are still in force.

Should the reliability of flow measurement at the Medway Gauge be so impaired as to question its accuracy, Franklin may request the Department's review and approval for the trigger mechanism to be transferred to another gauge. The Department reserves the right to require use of a different gauge.

## **8. Water Withdrawals that Exceed Baseline Withdrawal Volumes**

Franklin's baseline withdrawal rate is 3.10 MGD or 1131.5 MGY (Baseline). Franklin shall report its water withdrawal volumes annually in its ASR.

Franklin shall make a written evaluation of the costs and benefits of adopting and implementing each of the following Best Management Practices (BMPs) in an Offset Feasibility Study (Study) the first time its water withdrawals for a calendar year exceed its Baseline, beginning with calendar year 2009.

BMP's to be evaluated:

### **Development Guidelines**

- Low Impact Development, Conservation Development and Smart Growth bylaws or regulations in addition to those implemented through the November 2001 Best Development Practices Guidebook
- Land clearing/development bylaws (loam, native vegetation site clearing limitation, lawn size limitations) in addition to those implemented through the November 2001 Best Development Practices Guidebook

### **Water Bank**

- Traditional water and/or sewer bank
- Institute "hook-up" fee for all new development with revenues to be dedicated to water conservation programs such as rebate programs for homeowners (efficient appliances)

### **Stormwater Management and Recharge**

- Stormwater Utility or dedicated stormwater fees used to build and maintain stormwater infiltration facilities
- By-law implementing MA stormwater recharge standards townwide beyond the wetland areas required in the MA Stormwater Policy
- By-law requiring stormwater recharge above the rates required in the MA Stormwater Policy

### **Infiltration and Inflow**

- Enhanced I/I program going forward for the next 5 years

If Franklin is required to perform a Study, Franklin shall:

- Within 60 days of the filing of an ASR indicating that a Study is required, submit a Study Scope of Work to the Department for approval;
- Within 6 months of the Department's approval of the Study Scope of Work, submit the completed Study to the Department for approval;
- The Department's approval of the Study Scope of Work and the completed Study will be presumed if the Department does not issue a written approval or denial of such submission within 60 days of the date submitted to the Department for approval.

If Franklin files a subsequent ASR indicating that withdrawals for a calendar year again have exceeded its Baseline, then Franklin shall:

- Implement the results of the Study;
- Document such implementation annually at the time it files its ASR; and
- Continue to implement the results of the Study as long as withdrawals exceed Baseline.

## 9. Water Conservation Requirements

At a minimum, Franklin shall implement the following conservation measures forthwith and shall be in compliance with these measures on or before the next 5 Year Review of this permit. The Department recognizes that Permittee is currently implementing a number of these requirements. Compliance with the water conservation requirements shall be reported to the Department upon request or at the time of Permit Renewal unless otherwise noted below.

<b>Table 5: Minimum Water Conservation Requirements</b>	
<b>System Water Audits and Leak Detection</b>	
1.	At a minimum, conduct a full leak detection survey every three years. Franklin reports that it has conducted town-wide leak detection annually since October 1994 and shall continue to do so.
2.	Perform a leak detection survey of the entire distribution system within one year whenever the percentage of unaccounted for water increases by 5% or more (for example an increase from 3% to 8%) over the percentage reported on the ASR for the prior calendar year. Within 60 days of completing the leak detection survey, Franklin shall submit to the Department for its review a report detailing the leak detection survey, any leaks uncovered as a result of the survey or otherwise, dates of repair and the estimated water savings as a result of the repairs.
3.	Conduct field surveys for leaks and repair programs in accordance with the <u>AWWA Manual 36</u> .
4.	<p>Franklin shall have repair reports available for inspection by the Department. Franklin shall establish a schedule for repairing leaks that is at least as stringent as the following:</p> <ul style="list-style-type: none"> <li>- Leaks of three (3) gallons per minute or more shall be repaired as soon as possible, and in any event, within three (3) months of detection.</li> <li>- Leaks of less than three (3) gallons per minute at hydrants and appurtenances shall be repaired as soon as possible.</li> <li>- Leaks of less than three (3) gallons per minute shall be repaired in a timely manner, but in no event more than six (6) months from detection, except that leaks in freeway, arterial or collector roadways shall be repaired when other road work is being performed on the roadway.</li> </ul> <p>Leaks shall be repaired in accordance with Franklin's priority schedule including leaks up to the property line, curb stop or service meter, as applicable. Franklin shall have water use regulations in place that require property owners to expeditiously repair leaks on their property.</p>
<b>Metering</b>	
1.	Calibrate all source and finished water meters at least annually and report date of calibration on the ASR. Finished water meters measure water as it enters the Town's distribution systems for delivery to customers. In some cases suppliers provide treatment after withdrawal and before distribution. The treated volume can vary from the volume withdrawal from the source and measured by source meters.
2.	Franklin reports its system is 100% metered. All water distribution system users shall have properly sized service lines and meters that meet AWWA calibration and accuracy performance standards as set

<b>Table 5: Minimum Water Conservation Requirements</b>	
forth in <u>AWWA Manual M6 – Water Meters</u> , by the permit renewal date (March 1, 2009).	
3.	Franklin reports an ongoing program to inspect individual service meters to ensure that all service meters accurately measure the volume of water used by customers. The metering program shall include regular meter maintenance as set forth in <u>AWWA Manual M6 – Water Meters</u> , including testing, calibration, repair, replacement and checks for tampering to identify and correct illegal connections. The plan shall continue to include placement of sufficient funds in Franklin’s annual water budget to calibrate, repair, or replace meters as necessary.
<b>Pricing</b>	
1.	Continue a water pricing structure that includes the full cost of operating the water supply. Evaluate rates every three to five years and adjust costs as needed. Full cost pricing factors all costs - operations, maintenance, capital, and indirect costs (environmental impacts, watershed protection) - into prices.
2.	Franklin reports using an increasing block rate structure and shall continue to do so.
<b>Residential and Public Sector Conservation</b>	
1.	Franklin shall meet the standards set forth in the Federal Energy Policy Act, 1992 and the Massachusetts Plumbing Code.
2.	Meter or estimate water used by contractors using fire hydrants for pipe flushing and construction.
3.	<p>Municipal buildings</p> <ul style="list-style-type: none"> <li>Franklin reports that all public buildings and facilities are connected to the public water system. By January 1, 2009, submit to the Department a status report detailing which municipally owned public buildings in the Franklin’s service area have been retrofitted with water saving devices (faucet aerators, low flow shower heads and low flow toilets) and which of those buildings have yet to be retrofitted, along with a schedule to complete the retrofitting by January 1, 2010.</li> <li>On or before January 1, 2010, Franklin shall ensure that all municipally owned public buildings in the service area are retrofitted.</li> </ul> <p>Note municipally owned public buildings that are scheduled for rehab or demolition after the January 1, 2010 deadline for completing the retrofits, may with the Department’s approval, be exempted from this condition based on the schedule of work. Status report required above should identify those buildings and schedule for repairs/demolition.</p>
4.	All public recreational fields that are watered shall have meters. It is recommend that all grass (as opposed to synthetic turf) fields have moisture sensors.
<b>Industrial and Commercial Water Conservation</b>	
1.	Franklin shall review the use records for its industrial, commercial and institutional water users and develop an inventory of the largest water users. By March 1, 2009, Franklin shall develop and implement an outreach program designed to inform and (where appropriate) work with its largest industrial, commercial and institutional water users on ways to reduce their water use.. Such outreach plans can include, but are not limited to: information on water audits, meter sizing, water reuse, low-flow plumbing fixtures, mandatory outdoor water use restrictions, suggestions for contacting trade associations for process specific information on water use reductions, and information on contacting the Executive Office of Environmental Affairs Office of Technical Assistance for Toxics Use Reduction (OTA) which offers a range of assistance and information to help facilities improve water use efficiency and reduce wastewater discharge. OTA can be contacted at (617) 626-1060 or at <a href="http://www.mass.gov/envir/ota">www.mass.gov/envir/ota</a> .
2.	Upon request by the Department, Franklin shall report on industrial, commercial and institutional water conservation including the results of its review of water use records for industrial, commercial and institutional water users, the inventory of the largest water users, copies of any outreach materials distributed to industrial, commercial and institutional water users, and to the extent practical, a summary of water use reductions or savings that have resulted. Upon receipt of this report, the Department may require Franklin to take additional actions to reduce industrial, commercial and institutional water use.
<b>Public Education and Outreach</b>	
1.	Develop and implement a Water Conservation Education Plan. Franklin’s Water Conservation Education Plan shall be designed to educate Franklin’s water customers of ways to conserve water. Without limitation, Franklin’s plan may include the following actions:



**Table 5: Minimum Water Conservation Requirements**

<ul style="list-style-type: none"><li>• Include in bill stuffers and/or bills, a work sheet to enable customers to track water use and conservation efforts and estimate the dollar savings;</li><li>• Public space advertising/media stories on successes (and failures);</li><li>• Conservation information centers perhaps run jointly with electric or gas company;</li><li>• Speakers for community organizations;</li><li>• Public service announcements; radio/T.V./audio-visual presentations;</li><li>• Joint advertising with hardware stores to promote conservation devices;</li><li>• Use of civic and professional organization resources;</li><li>• Special events such as Conservation Fairs;</li><li>• Develop materials that are targeted to schools with media that appeals to children, including materials on water resource projects and field trips; and</li><li>• Make multilingual materials available as needed.</li></ul>
2. Upon request of the Department, Franklin shall report on its public education and outreach effort, including a summary of activities developed for specific target audiences, any events or activities sponsored to promote water conservation and copies of written materials.

**10. Requirement to Report Raw and Finished Water Volumes**

Franklin shall report annually on its ASR the raw water volumes and finished water volumes for the entire water system and the raw water volumes for individual water withdrawal points.

### **General Permit Conditions (applicable to all permittees)**

No withdrawal in excess of 100,000 gallons per day over the registered volume (if any) shall be made following the expiration of this permit, unless before that date the Department has received a renewal permit application pursuant to 310 CMR 36.00.

1. **Duty to Comply** The permittee shall comply at all times with the terms and conditions of this permit, the Act and all applicable State and Federal statutes and regulations.
2. **Operation and Maintenance** The permittee shall at all times properly operate and maintain all facilities and equipment installed or used to withdraw water so as not to impair the purposes and interests of the Act.
3. **Entry and Inspections** The permittee or the permittee's agent shall allow personnel or authorized agents or employees of the Department to enter and examine any property for the purpose of determining compliance with this permit, the Act or the regulations published pursuant thereto, upon presentation of proper identification and an oral statement of purpose.
4. **Water Emergency** Withdrawal volumes authorized by this permit are subject to restriction in any water emergency declared by the Department pursuant to MGL c 21G ss 15-17, MGL c 150 ss 111, or any other enabling authority.
5. **Transfer of Permits** This permit shall not be transferred in whole or in part unless and until the Department approves such transfer in writing, pursuant to a transfer application on forms provided by the Department requesting such approval and received by the Department at least thirty (30) days before the effective date of the proposed transfer. No transfer application shall be deemed filed unless it is accompanied by the applicable transfer fee established by 310 CMR 36.37.
6. **Duty to Report** The permittee shall complete and submit annually, on a form provided by the Department, all of the information required by said form including, without limitation, a certified statement of the withdrawal. Such report shall be received by the Department by the date specified on the form each year. Such report must be mailed or hand delivered to:

Department of Environmental Protection  
Drinking Water Program  
Water Management Program  
One Winter Street  
Boston, MA 02108

7. **Duty to Maintain Records** The permittee shall maintain withdrawal records and other information in sufficient detail to demonstrate compliance with this permit.
8. **Metering** All withdrawal points included within the permit shall be metered within one year of the date of issuance of the permit. Meters shall be maintained and replaced as necessary to ensure the accuracy of the withdrawal records.

### **APPEAL RIGHTS AND TIME LIMITS**

This permit is a decision of the Department. Any person aggrieved by this decision may request an adjudicatory hearing under the provisions of MGL c 30A. Any such request must be made in writing, by certified mail and received by the Department within twenty-one (21) days of the date of receipt of this

permit. No request for an appeal of this permit shall be validly filed unless a copy of the request is sent by certified mail or delivered by hand to the local water resources management official in the city or town in which the withdrawal point(s) is located; and for any person appealing this decision, who is not the applicant, unless such person notifies the permit applicant of the appeal in writing by certified mail or by hand within five (5) days of mailing the appeal to the Department.

### **CONTENTS OF HEARING REQUEST**

310 CMR 1.01(6)(b) requires the request to include a clear and concise statement of the facts which are the grounds for the request and the relief sought. In addition, the request must include a statement of the reasons why the decision of the Department is not consistent with applicable rules and regulations, and for any person appealing this decision who is not the applicant, a clear and concise statement of how that person is aggrieved by the issuance of this permit.

### **FILING FEE AND ADDRESS**

The hearing request, together with a valid check, payable to the Commonwealth of Massachusetts in the amount of \$100 must be mailed to:

Commonwealth of Massachusetts  
Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02211

The request shall be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

### **EXEMPTIONS**

The filing fee is not required if the appellant is a city or town (or municipal agency), county, district of the Commonwealth of Massachusetts, or a municipal housing authority.

### **WAIVER**

The Department may waive the adjudicatory hearing filing fee for any person who demonstrates to the satisfaction of the Department that the fee will create an undue financial hardship. A person, seeking a waiver must file, together with the hearing request, an affidavit setting forth the facts, which support the claim of undue hardship.

## **Appendix A – Residential Gallons Per Capita Day**

### **I. Compliance Plan Requirement**

If Franklin fails to achieve compliance with the RGPCD Performance Standard in its 2009 ASR, or in any ASR thereafter, then Franklin must file with that ASR a Residential Gallons Per Capita Day Compliance Plan (RGPCD Plan) which shall:

- a. meet the requirement set forth below in Section II;
- b. include measures to be implemented to meet the Performance Standard; and
- c. include the schedule for implementing such measures.

The filing of a RGPCD Plan shall not constitute a return to compliance, nor shall it affect the Department's authority to take action in response to Franklin's failure to meet the Performance Standard.

If a RGPCD Plan is required, Franklin must:

- a. submit information and supporting documentation sufficient to demonstrate compliance with its RGPCD Plan annually at the time it files its ASR; and
- b. continue to implement the RGPCD Plan until it complies with the Performance Standard and such compliance is documented in Franklin's ASR for the calendar year in which the standard is met.

### **II. Contents of a Residential Gallons Per Capita Day Compliance Plan**

At a minimum, all RGPCD Compliance Plans must include a detailed:

- a. description of the actions taken during the prior calendar year to meet the Performance Standard;
- b. analysis of the cause of the failure to meet the Performance Standard;
- c. description and schedule of the actions that will be taken to meet the Performance Standard; and
- d. analysis of how the actions described in c. will address the specific circumstances that resulted in the failure to meet the Performance Standard.

RGPCD Plans may be amended to revise the actions that will be taken to meet the Performance Standard. Amended RGPCD Plans must include the information set forth in paragraph above.

At a minimum, all RGPCD Plans for failure to meet the RGPCD Performance Standard must include implementation of at least one of the following residential conservation programs:

- a. a program that provides water saving devices such as faucet aerators and low flow shower heads at cost;
- b. a program that provides rebates or other incentives for the purchase of low water use appliances (washing machines, dishwashers, and toilets); or
- c. the adoption and enforcement of an ordinance, bylaw or regulation to require the installation of moisture sensors or similar climate related control technology on all automatic irrigation systems.

If Franklin is already implementing one or more of these programs, it must include in its RGPCD Plan the continued implementation of such program(s), as well as implementation of at least one additional program. All programs must include a public information component designed to inform customers of the program and to encourage participation in the program.

Without limitation, RGPCD Plans for failure to meet the RGPCD Performance Standard may include the following actions in addition to those outlined in the paragraph above:

- a. the use of an increasing block water rate or a seasonal water rate structure as a tool to encourage water conservation;
- b. a program that provides rebates or other incentives for the installation of moisture sensors or similar climate related control technology on automatic irrigation systems;
- c. the adoption and enforcement of an ordinance, bylaw or regulation to require that all new construction include water saving devices and low water use appliances;
- d. the adoption and enforcement of an ordinance, bylaw or regulation to require that all new construction minimize lawn area and/or irrigated lawn area, maximize the use of drought resistant landscaping, and maximize the use of top soil with a high water retention rate;
- e. the implementation of a program to encourage the use of cisterns or rain barrels for outside watering; and
- f. the implementation of monthly or quarterly billing.

## **Appendix B – Unaccounted for Water**

### **I. Compliance Plan Requirement**

If Franklin fails to achieve compliance with the UAW Performance Standard in its 2009 ASR, or in any ASR thereafter, then Franklin must file with that ASR an Unaccounted for Water Compliance Plan (UAW Plan) which shall:

- a) meet the requirements set forth below in Section II;
- b) include measures to be implemented to meet the Performance Standard; and
- c) include the schedule for implementing such measures.

The filing of a UAW Plan shall not constitute a return to compliance, nor shall it affect the Department's authority to take action in response to Franklin's failure to meet the Performance Standard.

If a UAW Plan is required, Franklin must:

- a. submit information and supporting documentation sufficient to demonstrate compliance with its UAW Plan annually at the time it files its ASR; and
- b. continue to implement the UAW Plan until it complies with the Performance Standard and such compliance is documented in Franklin's ASR for the calendar year in which the standard is met.

### **II. Contents of an Unaccounted for Water Compliance Plan**

Franklin has the choice to file a UAW Plan with measures tailored to the specific needs of its water supply system (Individualized UAW Plan) or a UAW Plan that includes Best Management Practices (BMP UAW Plan).

At a minimum, all UAW Plans must include a detailed:

- a. description of the actions taken during the prior calendar year to meet the applicable Performance Standard;
- b. analysis of the cause of the failure to meet the Performance Standard;
- c. description and schedule of the actions that will be taken to meet the Performance Standard; and
- d. analysis of how the actions described in c. will address the specific circumstances that resulted in the failure to meet the Performance Standard.

UAW Plans may be amended to revise the actions that will be taken to meet the Performance Standard. Amended UAW Plans must include the information set forth in the paragraph above.

#### **Individualized UAW Compliance Plan**

Without limitation, Individualized UAW Compliance Plans for failure to meet the UAW Performance Standard may include any of the actions set forth in the BMP UAW Compliance Plan below.

#### **BMP UAW Compliance Plan**

At a minimum, all BMP UAW Plans for failure to meet the UAW Performance Standard must include all of the following actions:

- a. within one year of filing the UAW Plan, complete a water audit and leak detection survey of the entire system and submit completed audit and survey to the Department; within one year of completing the audit and leak detection survey, conduct sufficient repairs to reduce by 75% (by water volume) all leaks detected in the survey; and

- within one year of completing such repairs, conduct additional repairs of leaks detected in the survey as may be necessary to reduce permittee's UAW to 10% or less;
- b. implementation of a program that ensures the inspection and evaluation of all water meters and, as appropriate, the repair, replacement and calibration of water meters in accordance with the following schedule:
    - Large Meters (2" or greater) - within one year of filing the BMP UAW Plan
    - Medium Meters (1" or greater and less than 2") - within two years of filing the BMP UAW Plan
    - Small Meters (less than 1") - within two years of filing the BMP UAW Plan;
  - c. implementation of monthly or quarterly billing within two years of filing the BMP UAW Plan; and
  - d. within one year of filing the UAW Plan, implementation of a water pricing structure that achieves sufficient revenues to pay the full cost of operating the system including, without limitation, the costs of repairs under paragraph a., the costs of meter repairs, replacements and calibrations under paragraph b., the costs of employees and equipment, and ongoing maintenance and capital costs.

## **Appendix C – Summer Limits on Withdrawals**

### **I. Nonessential Outdoor Water Use**

As stated in Special Condition #7, in Water Management Act permits, “nonessential outdoor water use” includes uses that are not required:

- a. for health or safety reasons;
- b. by regulation;
- c. for the production of food and fiber;
- d. for the maintenance of livestock; or
- e. to meet the core functions of a business.

Examples of **nonessential** outdoor water uses include:

- irrigation of lawns,
  - except by means of a hand-held hose outside the hours of 9AM and 5PM;
- washing of vehicles other than by means of a commercial car wash,
  - except as necessary for operator safety; and
- washing of exterior building surfaces, parking lots, driveways or sidewalks,
  - except as necessary to apply paint, preservatives, stucco, pavement or cement.

Examples of **acceptable** outdoor water uses outside the hours of 9 AM and 5 PM include:

- irrigation to establish a new lawn during the months of May and September;
- irrigation for the production of food and fiber or the maintenance of livestock;
- irrigation by plant nurseries as necessary to maintain stock;
- irrigation by golf courses as necessary to maintain tees and greens only; and
- irrigation of public parks and recreational fields.

### **II. Accessing Mean Daily Streamflows for the Medway Gauge Via the USGS Website**

The USGS Streamflow website default shows Massachusetts streamflows in real time, i.e., the most recent periodic, usually quarterly hourly, reading made at each USGS stream gauge. This real-time data can vary widely over the course of a day and is not used to trigger the Water Management Permit Summer Limits on Withdrawals.

To trigger the Summer Limits on Withdrawals, the Department relies on the mean daily streamflows. The mean daily cannot be calculated until after midnight each day when USGS computes the hourly data into a mean daily streamflow.

Go to <http://waterdata.usgs.gov/ma/nwis/current/?type=flow> for daily mean streamflow data at the **Medway Gauge**. If you need assistance navigating the USGS web site to find the mean daily streamflow, contact Water Management Program staff at the MassDEP Boston Office at (617) 292-5532, or Water Management Act Program staff at the Central Regional Office at (508) 767-2724.



## **Attachment A: Franklin Summer Water Use Restrictions**

For the past five years, Franklin has decreased summer demand through the imposition of mandatory water use restrictions of “one-day-per-week” lawn watering, with no watering between 9 am and 5 pm. Franklin is also empowered to ban all outdoor water use when conditions become severe. The one-day-per-week is the same day as trash day, with no lawn watering on the weekend.

Franklin will set the start and end dates of watering restrictions each year by tracking a combination of demand, tank levels, pumping limits and well drawdown. However, under no circumstances shall the restrictions begin later than the 1<sup>st</sup> Monday in June of each year, nor shall the restrictions end earlier than the 2<sup>nd</sup> Monday in September.

Franklin shall notify its customers before water use restrictions go into effect each year of the restrictions and the consequences for failing to adhere to the restrictions. Notice must include:

- The need to limit water use, especially nonessential outdoor water use, to ensure a sustainable drinking water supply and to protect environmental resources;
- Ways individual homeowners can limit water use, especially nonessential outdoor water use;
- A detailed description of the restrictions and penalties for violating the restrictions.

Notice that restrictions have been put in place shall be filed each year with the Department within 14 days of the restriction’s effective date. Filing shall be in writing on the Water Use Restrictions Form at <http://www.mass.gov/dep/water/approvals/wmgforms.htm#conserve>.

As used herein, “nonessential outdoor water use” includes uses that are not required:

- (f) for health or safety reasons;
- (g) by regulation;
- (h) for the production of food and fiber;
- (i) for the maintenance of livestock; or
- (j) to meet the core functions of a business.